

02/13/02

U.S. PTO

PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

GSC 13,817-4

First Inventor

Norden E. Huang

Title

Empirical Mode Decomposition for Acoustical Signal

Express Mail Label No.

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages **96**]  
(preferred arrangement set forth below)  
- Descriptive title of the invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table,  
or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **121**]
5. ☐ Oath or Declaration [Total Pages ]  
a. ☐ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)  
i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies); or  
ii. ☐ paper
- c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement of Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP)of prior application No.: **10, 011,206**

Prior application information:

Examiner: .....

Group Art Unit: .....

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**☒ Customer Number or Bar Code Labelor ☐ Correspondence address below

Name

**21872**

PATENT TRADEMARK OFFICE

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Chan K. Park

Registration No. (Attorney/Agent)

48,175

Signature

Date

2/12/02

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual/case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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**FEE TRANSMITTAL**  
**for FY 2002**

Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT** (\$) **870.00****Complete if Known**

Application Number	
Filing Date	2/13/02
First Named Inventor	Norden E. Huang
Examiner Name	
Group Art Unit	
Attorney Docket No.	GSC 13,817-4

**METHOD OF PAYMENT**

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
- Deposit Account Number **14-0116**
- Deposit Account Name **NASA**
- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
- ☒ Applicant claims small entity status. See 37 CFR 1.27
2. ☐ **Payment Enclosed:**
- ☐ Check ☐ Credit card ☐ Money Order ☐ Other

**FEE CALCULATION****1. BASIC FILING FEE**

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101	740	201 370	Utility filing fee	740.00
106	330	206 165	Design filing fee	
107	510	207 255	Plant filing fee	
108	740	208 370	Reissue filing fee	
114	160	214 80	Provisional filing fee	

**SUBTOTAL (1)** (\$) **740.00****2. EXTRA CLAIM FEES**

	Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	20	-20** =	X	0.00
Multiple Dependent	3	-3** =	X	0.00

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
103	18	203 9	Claims in excess of 20	
102	84	202 42	Independent claims in excess of 3	
104	280	204 140	Multiple dependent claim, if not paid	
109	84	209 42	** Reissue independent claims over original patent	
110	18	210 9	** Reissue claims in excess of 20 and over original patent	

**SUBTOTAL (2)** (\$) 

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Fee Code	Large Entity Fee (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105	130	205 65	Surcharge - late filing fee or oath	
127	50	227 25	Surcharge - late provisional filing fee or cover sheet	
139	130	139 130	Non-English specification	
147	2,520	147 2,520	For filing a request for ex parte reexamination	
112	920*	112 920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115	110	215 55	Extension for reply within first month	
116	400	216 200	Extension for reply within second month	
117	920	217 460	Extension for reply within third month	
118	1,440	218 720	Extension for reply within fourth month	
128	1,960	228 980	Extension for reply within fifth month	
119	320	219 160	Notice of Appeal	
120	320	220 160	Filing a brief in support of an appeal	
121	280	221 140	Request for oral hearing	
138	1,510	138 1,510	Petition to institute a public use proceeding	
140	110	240 55	Petition to revive - unavoidable	
141	1,280	241 640	Petition to revive - unintentional	
142	1,280	242 640	Utility issue fee (or reissue)	
143	460	243 230	Design issue fee	
144	620	244 310	Plant issue fee	
122	130	122 130	Petitions to the Commissioner	130.00
123	50	123 50	Processing fee under 37 CFR 1.17(q)	
126	180	126 180	Submission of Information Disclosure Stmt	
581	40	581 40	Recording each patent assignment per property (times number of properties)	
146	740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279 370	Request for Continued Examination (RCE)	
169	900	169 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$) **130.00****SUBMITTED BY**Name (Print/Type) **Chan K. Park**

Registration No. (Attorney/Agent)

**48,175****Complete (if applicable)**Telephone **301-286-7351**

Signature

Date

**2/12/02****WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Norden E. Huang

Serial No. :

Group:

Filed: Concurrently Herewith

Examiner:

For: **EMPIRICAL MODE DECOMPOSITION FOR ANALYZING  
ACOUSTICAL SIGNALS**

LETTER TO THE OFFICIAL DRAFTSPERSON  
AND PETITION UNDER 37 C.F.R. § 1.84 (a) (2)  
REQUESTING ACCEPTANCE OF COLOR DRAWINGS

February 13, 2002

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Attached hereto are three sets of twenty seven (27) sheet(s) of color drawings which comply with the provisions of 37 C.F.R. § 1.84 (a) (2). The color figures are Figs: 6(a), 6(b), 6(c), 29, 33, 38, 47(a), 47(b), 48(a), 48(b), 49(a), 49(b), 50, 51(a), 51(b), 52(a), 52(b), 53(a), 53(b), 54(a), 54(b), 58(a), 58(b), 59(b), 62(a), 62(b), and 62(c). The drawings should be made a part of the record of the above-identified application.

Applicant respectfully petitions under 37 C.F.R. § 1.84 (a) (2) and requests that the Patent Office accept the accompanying color drawings as the official drawings in the

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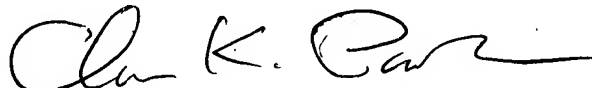
present application. Color drawings are necessary because they are the only practical medium by which to disclose the subject matter sought to be patented. One of the inventive aspects disclosed and claimed in the above-identified application is generating color screen displays (e.g. color Hilbert spectrum displays). Such color screen displays permit an operator, such as a research scientist, to fully analyze a range of properties in the processed signal. Because some valuable information would be lost if black and white screen displays are utilized, color screen displays (as represented by the color drawings submitted herewith) are necessary as the only practical medium by which to disclose the subject matter sought to be patented.

Page 1 of the specification contains the Color Drawing Notification.

Applicant has included the appropriate petition fee of \$130.00, under 37 C.F.R. § 1.17 (h) and the petition under 37 C.F.R. § 1.84 (a) (2).

Please charge any fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 14-0116.

Respectfully submitted,



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